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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/715,623

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EXAMINER

HALEY, JOSEPH R

ART UNIT

PAPER NUMBER

2627

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/715,623	<b>Applicant(s)</b> FURUKAWA ET AL.	
	<b>Examiner</b> JOSEPH HALEY	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-5, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyata (US 6052347) in view of Hagiwara (US 6987717).

In regard to claim 1, Miyata teaches an optical disk apparatus capable of recording a signal on an optical disk by directing an optical beam thereon at a plurality of recording speeds which are different from each other at the same radius (see fig. 4. When the apparatus arrives at R2, it resets the speed to Vr. At this time the linear velocity at R1 will no longer be Vr but a lower velocity), said apparatus comprising: a condition measuring position storing part that stores one or more condition measuring positions at which a condition of the signal is measured for each of the recording speeds (fig. 12 element 41); and a signal condition measuring part that measures the condition of the signal, which condition of the signal is used for write power compensation, by suspending a recording operation at the condition measuring positions stored in said condition measuring position storing part (fig. 12 element 43), wherein, in said condition measuring position storing part, the condition measuring positions for a recording speed whose level is one level lower than a level of a

predetermined recording speed are set to positions shifted for a predetermined time from respective condition measuring positions for the predetermined recording speed (see fig. 8 elements 11 and 15. The opc area 11 is at a location that has a lower speed than the predetermined speed of area 15, both of which are set at predetermined positions at predetermined times) but does not teach said optical disk apparatus is configured to perform WPC, said WPC being carried out during recording by interrupting recording at a predetermined position, verifying the condition measured by the signal condition measuring part, correcting the recording power or reducing the recording speed in accordance with the status of the verified recording condition, and then restarting recording (column 18 lines 26-63).

The two are analogous art because they both deal with the same field of invention of recording on optical media.

At the time of invention it would have been obvious to one of ordinary skill in the art to provide the apparatus of Miyata with the power control of Hagiwara. The rationale is as follows: At the time of invention it would have been obvious to provide the apparatus of Miyata with the power control of Hagiwara because it would dynamically update the recording conditions.

Hagiwara teaches said optical disk apparatus is configured to perform WPC, said WPC being carried out during recording by interrupting recording at a predetermined position, verifying the condition measured by the signal condition measuring part, correcting the recording power or reducing the recording speed in accordance with the status of the verified recording condition, and then restarting recording.

In regard to claim 2, Miyata teaches wherein the predetermined time is set to a time interval from when the predetermined recording speed is changed to the lower level recording speed until the recording operation is stabilized after the recording operation is resumed at the lower level recording speed (See fig. 4. The predetermined time is the time it takes to get from zone 1 to zone 2).

In regard to claim 4, see claim 1 rejection above.

In regard to claims 5 and 8, see claim 2 rejection above.

In regard to claim 7, Miyata teaches a condition measuring position setting method of setting a condition measuring position at which a condition of a signal recorded on an optical disk is measured by an optical disk apparatus capable of recording the signal on the optical disk by focusing an optical beam thereon at a plurality of recording speeds which are different from each other at the same radius (see fig. 4. When the apparatus arrives at R2, it resets the speed to  $V_r$ . At this time the linear velocity at R1 will no longer be  $V_r$  but a lower velocity), said method comprising the steps of: arbitrarily setting first condition measuring positions for a maximum recording speed (fig. 6 element 15 corresponds to the maximum speed); setting second condition measuring positions for a second recording speed whose level is one level lower than a level of the maximum recording speed to positions that are shifted for a predetermined time from the respective first condition measuring positions (fig. 6. element 11); and when setting third condition measuring positions for a third recording speed whose level is lower than the level of the second recording speed, setting the third condition measuring positions to positions that are shifted for the predetermined

time from respective measuring positions of a recording speed whose level is one level higher than the level of the third recording speed (see the second OPC in zone 2 of fig. 6).

Claims 3, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata.

In regard to claims 3, 6 and 9, Miyata teaches all the elements of these claims (see the 102 rejection above) except wherein the predetermined time is set to two minutes. However, setting the predetermined time to two minutes is within the level of one having ordinary skill in the art since Miyata does teach the use of setting the predetermined time.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the predetermined time set to two minutes.

The motivation would have been optimization/experimentation in the course of routine engineering. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationships set forth in claims 3, 6 and 9 are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575,

1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH HALEY whose telephone number is (571)272-0574. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/  
Supervisory Patent Examiner, Art  
Unit 2627

/Joseph Haley/  
Examiner, Art Unit 2627